REMARKS

In the patent application, claims 1-23 are pending. In the office action, all pending claims are rejected.

At Section 3 of the office action, claim 15 is objected to because of informalities. Applicant has amended claim 15 to remove the informalities as suggested. No new matter has been introduced.

At Section 5, claims 11 and 12 are rejected for lacking antecedent basis regarding the recitation of "the communication channel". Applicant has amended claims 11 and 12 to change "the communication channel" to "the frequency channel" to overcome the rejection. The support for the amendment can be found in claim 2.

At Section 6, claim 13 is rejected for lacking antecedent basis regarding the recitation of "the master device". Applicant has amended claim 13 to include the limitation that the communication network has a master device for communicating with the slave devices. The support for the amendment can be found in Figure 1a and on p.8, line 5 of the specification. No new matter has been introduced.

At Section 8, claims 1-5, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatenble over *Manny* (U.S. Patent No. 5,696,903) in view of *Souissi et al.* (U.S. Patent No. 6,327,300 B1, hereafter referred to as *Souissi*). The Examiner states that *Manny* and *Souissi* discloses a method and system for establishing a connection link between a master device and slave devices. The Examiner admits that *Manny* fails to disclose a non-frequency hopping connection link, but points to *Souissi* for disclosing a non-frequency hopping link along with a frequency hopping link. The Examiner states that *Soussi* discloses in Figure 2 a flow chart illustrated the steps involved in determining the mode of operation – non-frequency hopping or frequency hopping between a master device and slave devices. The Examiner alleges that the combination of *Souissi's* use of dynamic spectrum allocation for transmission of data and *Manny's* frequency hopping system is equivalent to the claimed invention.

It is respectfully submitted that *Souissi* discloses a communication system wherein the communication between a master device and one or more slave device is carried out by

transmission of data in two types: a first type using Bluetooth 1.0 or BT1 signaling and a second type using Bluetooth 2.0 or BT2 signaling. BT1 signaling typically involves bandwidths that are of a fixed size, occupying one frequency channel (Col. 4, lines 39-43). BT2 signaling is a high-speed link that utilizes a bandwidth of variable size sufficient for the transmission of data. The link can be dynamically allocated in terms of bandwidth, data rate, modulation or otherwise (Col. 4, line 64 to col.5, line 6). The communication between the master device and the slave device involves a number of signaling steps: polling, requesting, responding and data transfer.

The first data type (BT1 signaling) is used for:

1) polling by the master device (Figure 3, element 101, at time slot 0, channel 7; time slot 3, channel 5, for example);
2) responding with acknowledgement by the slave device to the polling (Figure 3, element 102, at time slot 1, channel 1; time slot 21, channel 6, for example), sometimes with the suggested spectrum for transmission of data (at time slot 7, channel 10; time slot 21, channel 16); sometimes with a confirmation of its returning to BT1 signaling after transmission of data of the second type (at time slot 15, channel 13; time slot 63, channel 7, for example); and
3) sending request by a slave device to the master device (Figure 3, a time slot 8, channels 4-8; time slot 22, channels 7-9, for example).

The second data type (BT2 signaling) used for:

1) response by the master device with its acknowledgment of the slave's spectrum request (at time slot 8, channels 4-8); or with its proposed received spectrum (at time slot 10, channels 4-8; time slot 56, channels 1-5); and
2) transmission of data of second type by the slave device to the master device (Figure 3, element 103, at time slots 11, 12, channels 4-8; time slots 31, 32, channels 2-6).

Souissi does not define the hopping natures of the high-speech connection. *Souissi* only discloses that Bluetooth radio uses frequency hopping scheme to make the link robust (col. 1, lines 32-36). However, by definition, BT2 is operated in a non-frequency hopping fashion and BT1 is operated in a frequency hopping fashion. *Souissi* discloses using BT1 only for polling by the master device and acknowledgement by the slave (with or without

suggested spectrum for data transmission). BT1 is not used for packet data transmission by the slave device. According to *Souissi*, packet data transmission (of the second type) by the slave device is carried out on the high-speed link of BT2. However, because the master device does not know ahead of time the data amount the slave device is going to transmit, the master device is unable to select the channels so that all the BT2 data packets are going to be transmitted in the same channels. If the data amount is small, it is more likely that the same channels will be used in different time slots as shown in time slots 11 and 13. If the data amount is large, different channels may be used in different time slots as shown in time slots 25, 27, 31 and 33. Regardless of whether the same frequency channels or different channels are used to transmit the entire data amount, BT2 signaling (non-frequency hopping, by definition) is always used.

In contrast, in the claimed invention, the frequency hopping link (BT1) is maintained or established if the non-frequency hopping link (BT2) is unavailable. Frequency-hopping and non-frequency hopping, as known in the industry, are special terms associated with Bluetooth technologies.

For the foregoing reasons, claims 1, 14 and 20 are clearly distinguishable over the cited *Mahany* and *Souissi* references.

As for claims 2-5, 15 and 21-13, they are dependent from claims 1, 14 and 20 and recite features not recited in claim 1, 14 and 20. For reasons regarding claims 1, 14 and 20 above, it is respectfully submitted that claims 2-5, 15 and 21-23 are also distinguishable over the cited *Mahany* and *Souissi* reference.

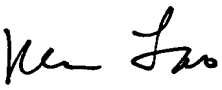
At Section 9, claims 6-13 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Mahany*, in view of *Soussi* and further in view of *Foster. Jr.* (U.S. Patent Number 5,528,623, hereafter referred to as Foster). The Examiner states that *Foster* discloses a communications system including at least two communications units, each unit having a transmitter capable of transmitting to other units at different power levels and on different frequencies. However, *Foster* does not disclose how frequency hopping and non-frequency hopping are used. Claims 6-13 and 16-19 are dependent from claims claim 1 and 14 and recite features not recited in claims 1 and 14. For reasons regarding claim 1 and 14 above, it

is respectfully submitted that claims 6-13 and 16-19 are also distinguishable over the cited *Mahany*, *Soussi* and *Foster* references.

CONCLUSION

As amended, claims 1-23 are allowable. Early allowance of all pending claims is earnestly solicited.

Respectfully submitted,



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